

Date of Deposit: May 11, 2007

Our Case No. 068550/0105

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
)	
Michael Hollerman, et al.)	
Serial No.: 09/912,709)	Examiner: Daniel Kesack
Filing Date: July 25, 2001)	Group Art Unit No.: 3691
For:)	
System And Method For)	
Displaying Option Market)	
Information)	

DECLARATION UNDER 37 C.F.R. § 1.131

Commissioner for Patents
Washington, D.C. 20231

Sir:

1. We, Michael Hollerman, Joseph Hernandez, J. Brad Peek, Rajesh Aery, Hua Chen, Susan DiMagno, do declare and state:
2. We are the inventors of claims 1-178 of the above-identified application.
3. The project charter dated June 22, 2000, attached hereto as Exhibit 1, was prepared with our direct input and under our direct guidance. All work and associated writings, including the email correspondence attached hereto as Exhibit 2, were carried out in Chicago, Illinois.
4. All dates on the attached exhibits have been masked unless otherwise stated herein by reference to specific dates.

5. Prior to September 13, 2000, we conceived of and completed the invention as described and claimed in the above-identified application, as evidenced by the following:

a. Figure 1 of the project charter attached as Exhibit 1 corresponds to Figure 1 of the above-identified application.

i. As shown in Figure 1 of the attached project charter, we, the named inventors of the above-identified application, prepared a network system, known as "Pulse," for providing a secure, reliable, timely pathway for transmission of option market data to users and members. The network system is a browser based application system. Users or members of the network system access the network system using their own member computers. Each member computer preferably includes a downloaded system applet and a monitor for viewing data. The then recommended configuration for the member computer included a 500 MHz or higher central processing unit, 128 RAM or higher, a 19" monitor with a resolution of 1024x768 or higher, NT 4.0 or Windows 2000, Internet Explorer or Netscape 4.0 or higher with a Java VM installed, and a high speed Internet connection.

ii. As further illustrated in Figure 1 of the attached project charter, the member computer connects via an Internet service provider and the Internet to a member server for login and security processing. Alternatively, the member can use a dedicated line or a modem to directly connect to the first member server. Upon login, the member server

accesses the member database for authentication. Once the user gains entrance to the network system, the system applet connects to at least one second server. The second server requests market data from a Post Data Server (PDS). The second server also holds market data that is retrieved through a session with the PDS. The PDS monitors the list of options displayed on the second server and provides dynamic broadcasts to the second server. The PDS receives market information from a Transaction Processing Facility (TPF) through a Host GateWay (HGW). The network system can include a hot backup PDS, so that, in the event of a PDS outage, the second server can be configured to log onto a backup PDS without any noticeable disruption to the user.

b. As stated in the attached project charter, the invention included the development of a new application that runs within a browser as an applet window. Exchange members would access the system by logging into the exchange's member site. Option class display page functionality is supported and a snap quote function for request retrieval of series information was described.

c. As further stated in the attached project charter, once the user has gained entrance through the member site, the applet will connect to a Pulse Server. The Pulse server holds market data that is retrieved through a session with a PDS server (*See Figure 1 - CBOE Pulse Architecture*). The PDS keeps a list of the series that the Pulse Server is displaying and provides dynamic

×

broadcasts to the Pulse server. The PDS server has a hot backup. In case of a PDS server outage, the Pulse server will log onto a backup PDS server without any noticeable disruption to the user.

d. As additionally stated in the attached project charter, the broadcast messages sent from PDS to the Pulse server contain a bid and ask size field. The Pulse client application accepts the new broadcast message and to display the new bid and ask size fields.

e. As further stated in the attached project charter, the PDS server stores limit book orders for series that are tagged by the Pulse Server. The Pulse Server requests the book orders for the Post Data Server for a specific series.

6. The named inventors worked on the subject matter of the above-identified application continuously from prior to September 13, 2000 until the subsequent actual reduction to practice of the invention disclosed therein, as evidenced by the following:

a. Email correspondence including at least one of the named inventors of the above-identified application dated November 2, 2000 stating that the system was operational and actually reduced to practice as of November 2, 2000.

b. Email correspondence including at least one of the named inventors of the above-identified application dated October 30-31, 2000 indicating that work was being done on the subject matter of the above-identified application.

c. Email correspondence including at least one of the named inventors of the above-identified application dated September 5-12, 2000 indicating that work was being done on the subject matter of the above-identified application.

d. Email correspondence including at least one of the named inventors of the above-identified application dated September 7, 2000 indicating that weekly status meetings occurred between September 1, 2000 and October 27, 2000 to discuss work that was being done on the subject matter of the above-identified application.

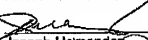
e. Email correspondence including at least one of the named inventors of the above-identified application dated August 31, 2000 indicating that work was being done on the subject matter of the above-identified application.


f. Email correspondence including at least one of the named inventors of the above-identified application dated August 14, 2000 indicating that work was being done on the subject matter of the above-identified application.


g. Email correspondence including at least one of the named inventors of the above-identified application dated June 26-27, 2000 indicating that work was being done on the subject matter of the above-identified application.

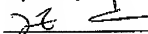
I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18, Section 1001 of the United States Code and that such willful false statements may jeopardize the validity of any United States Letters Patent resulting from the above-captioned United States patent application.


Date: 4-30-07

Michael HollermanDate: 04/11/07

Joseph HernandezDate: 04/05/07

J. Brad PeekDate: 04/05/07

Rajesh AeryDate: 04/05/07

Hua ChenDate: 05/09/07

Susan DiMaggio

SYSTEMS DIVISION

PROJECT CHARTER

CBOE Pulse

Document #2134

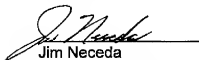
WR #2134

Prepared by:
Linda Gerdes

Approved by:



Bobbie Pivnicki
Market Operations



Jim Neceda
Systems Division

APPROVED

CBOE Pulse – Project Charter Distribution List**Staff**

Raj Aery
Tom Busch
Hua Chen
Bill Gilund
Joe Hernandez
Dave Hultquist
Keith Kiley
Tom Knorring
Terry Land
Wally Meagher
Al Monjarro
Anthony Montesano
Roger Mulcahy
Jim Neceda
Mark Novak
Gerry O'Connell
Dennis Paradiso
Brad Peek
Bob Peterson
Larry Pfaffenbach
Bobbie Piwnicki
Gatum Roy
Curt Schumacher
Phil Slocum
John Strege
Eileen Smith
Jim Wang
Tim Watkins
Dave Wegener
Margaret Williams

CBOE Pulse

Table of Contents

1	Goal	1
2	Objective	1
3	Business Case	1
4	Strategy.....	1
5	Tactics.....	2
6	Project Scope and Approach	2
7	Assumptions and Issues	6
8	Risk/Exposure	6
9	Cost/Benefit Analysis	6
10	Environmental Analysis.....	7
11	Schedule and Dependency Constraints.....	7
12	Resource Skill Needs.....	7
13	Product Research	7
14	APPENDIX I - HARDWARE & SOFTWARE COSTS	8

Table of Figures

Figure 1 -CBOE Pulse Architecture.....	5
--	---

CBOE Pulse PROJECT CHARTER

1 Goal

The goal of the CBOE Pulse Project is to provide a secure, reliable, timely pathway for transmission of CBOE market data.

2 Objective

The objective for the CBOE Pulse Project is to create a browser-based application that displays intra-day quotes and top of the book. The applet will be accessible only to CBOE members via the CBOE members web site. A later phase will add bid and ask size, book depth, and display of Screen-based trading information.

3 Business Case

CBOE is developing CBOE Pulse in order to respond to competitive business drivers. The International Securities Exchange (ISE) is directly disseminating market data to their members. CBOE Pulse will directly disseminate our market data to our members. As soon as CBOE internal systems are ready to begin sending quotes with size, we will include this data in the CBOE Pulse application. We will not be dependent upon OPRA's readiness to accept a size field for bid and ask quote dissemination.

Developing CBOE Pulse enables us to bypass any OPRA queues that may occur during times of heavy volume. During times of peak quote traffic, OPRA is unable to handle throughput adequately. This results in message queues and consequently stale quotes. Stale quotes misrepresent the CBOE market to the customer and trading desks as well. Although the capacity problem is on OPRA's end and not ours, the result is still an adverse one for CBOE. Disseminating our quotes directly to our members would circumvent this situation.

4 Strategy

An initial set of CBOE Pulse functions will be developed in Phase 1, in advance of functions which require more significant TPF work.

4.1 Phase 1

The following functions are planned for Phase 1.

- Database connectivity to the member's site will limit login and number of browser per member
- Request for a snap quote. Input will require a symbol, an expiration month, and a strike price. Both call and put data will be returned. This function is a request-by-request retrieval. It does not update dynamically.

- Request for standard class display page like the WDN. Underlying ticker and recap broadcast are displayed at the bottom of the class display page. The first page will be returned if the user does not enter a page number. All other pages can be accessed from this point with up and down arrow keys.

4.2 Phase 2

The following functions are planned for Phase 2.

- Provide the limit book depth for a series.
- Provide a bid and ask size for each quote.
- Create a quote montage configurator.
- Using the configurator, allow different class/series data to be displayed in a single window.
- Other functions requested via member feedback.

4.3 Phase 3

The following function is planned for Phase 3.

- Connect CBOE Pulse to SBT API to disseminate SBT information.

5 Tactics

1. The Web development team will develop the Phase I functionality.
2. Simulator tools to emulate client requests and broadcasts from the Pulse server to the Post Data Server(PDS) will be developed. These tools are essential to creating traffic that will be used to performance test the PULSE application.
3. The Phase I application will be made available to an initial set of member firms which were requestors of this project.
4. The application will be made available to all members.

6 Project Scope and Approach

6.1 Scope – Phase I

This project's scope will be limited to the development of a new CBOE Pulse application that runs within a browser as an applet window. Approximately 200 CBOE members will access CBOE Pulse by logging into the CBOE member site. The number of applet windows that each member can open will be limited. This will be determined during performance testing. Only current class display page functionality will be supported and a snap quote function for request retrieval of series information will be developed.

Web Development

- Create a JAVA applet that supports snap quote, standard class display page and sliding underlying ticker and recap.

- Create a CBOE Pulse server application that is responsible for user validation, security, and broadcast update functionality.
- Create simulator tools that will emulate client requests and broadcast updates from the Post Data Server to the CBOE Pulse server.

6.2 Scope – Phase II

Web Development

- Create a configurator tool that provides capability for the user to create a series montage display.
- Modify CBOE Pulse client to display limit orders (book depth) for a series.
- Modify CBOE Pulse client to display bid and ask sizes.

TPF Development

- Create a limit order service that will transmit all limit orders for a requested class.

Server Development

- Create a limit order process to receive limit orders from TPF and store them in a local database.
- Create limit order broadcast process to transmit limit orders to CBOE Pulse client for display.

6.3 Approach

CBOE Pulse will use the current CBOE Internet server for login and security processing. An additional hot backup to the CBOE Internet server will be implemented. This will provide system redundancy for the current Internet server. The other CBOE Pulse components will be deployed on a new infrastructure built upon the PDS-RCN architecture. This architecture offers reliability, redundancy, and reuse of programming code.

Once the user has gained entrance through the CBOE member site, the CBOE Pulse applet will connect to a load balancer which in turn will en-route the request to the appropriate and available CBOE Pulse Server. The CBOE Pulse server holds market data that is retrieved through a session with a PDS server (See Figure 1 *CBOE Pulse Environment*). The PDS will keep a list of the series that the CBOE Pulse Server is displaying and will provide dynamic broadcasts to the CBOE Pulse server. The PDS server will have a hot backup. In case of a PDS server outage, the CBOE Pulse server will log onto a backup PDS server without any noticeable disruption to the user.

The following approach has been proposed for Phase II of CBOE Pulse project. Under WR2037, Quotes With Size, internal CBOE systems will be modified to include a bid and ask size field. After this work is complete, the broadcast messages sent from PDS to the Pulse server will contain a bid and ask size field.

The Pulse client application will be modified to accept the new broadcast message and to display the new bid and ask size fields.

To deploy the display of book depth, the PDS server will be modified to store limit book orders for series that are tagged by the CBOE Pulse Server. TPF will develop a limit book service that will transmit limit book orders to PDS through the Host Gateway. The Pulse Server will request the book orders for the Post Data Server for a specific series.

7 Assumptions

- Only members with a CBOE assigned login and password will have access to the CBOE Pulse application.
- Transmitting market data directly to our member is the same as what ISE is doing and does not violate the OPRA agreement.

8 Risk/Exposure

The risk related to size and structures are moderate, and the technology risk is small. One department will be involved in the development and testing for Phase I. The new system will interface with one other existing system.

The main area of exposure is the timeliness of the market data. Market data delivery options are an Internet Service Provider (ISP) or , for a more deterministic configuration, using a leased line. This will be evaluated during performance testing and CBOE will provide connectivity requirements and recommendations.

9 Cost/Benefit Analysis

9.1 Costs

The total estimated one-time costs for the CBOE Pulse project Phase I as described above are as follows:

PHASE I

	Cost
PC hardware, software and cabling	\$1,091,200
Development @ 8K/MM(Web 6MM)	\$48,000
Consultants @16K/MM(6M)	\$96,000
Total Installation	\$1,235,200

The details for the above are in Appendix I, Hardware & Software Costs.

The estimated one-time costs for the CBOE Pulse Project Phase II as described above are as follows:

PHASE II

	Man Months	Cost
TPF APPLICATIONS	7	56,000
WEB DEVELOPMENT		
SERVER APPLICATIONS	8	64,000
TOTALS		

Annual On-Going Costs

The annual on-going costs are in Appendix A. The estimated on-going costs are \$163,680 per year. Current Systems personnel will provide support.

9.2 Benefits

The major benefit is that members will have the ability to view CBOE market data independently of any external vendor source. This eliminates any transmission delays that are a result of sending data through multiple data centers. Additionally new types of data can be made available to our members without any dependency upon the readiness of outside vendors to receive them.

10 Environmental Analysis

10.1 Platform

Initial access to the CBOE Pulse application requires each CBOE member to have a browser and an Internet Service Provider to connect to the CBOE member's site. CBOE will provide requirements and recommendations for the hardware, bandwidth, and software use of Pulse.

10.2 Performance Impact

The current internet infrastructure will incur an increase in network traffic as a result of the CBOE Pulse project. The network software group will need to monitor the affect of the additional network traffic on bandwidth, the firewalls, routers, and load balances. The current fractional T3 line to PSI will need to be upgraded to accommodate the increase in data from CBOE Pulse.

Capacity testing has shown that the Oracle server and database used by Web applications can handle the additional activity generated by CBOE Pulse. There are no anticipated performance problems with the Oracle database or its server.

11 Schedule and Dependency Constraints

The quoting with size functionality is dependent upon TPF changes being implemented for *WR #2037 Quoting With Size*. Displaying book depth on CBOE Pulse is dependent upon TPF and Post Data Server modifications. Phase II priority will have to be determined with other competing TPF and Server project priorities.

Phase III functionality is dependent upon the roll-out of the Screen-based Trading Project..

12 Resource Skill Needs

In-house resources have the skills necessary to complete the CBOE Pulse Project.

13 Product Research

No further investigation of products or vendors will be necessary to complete the CBOE Pulse Project.

14 APPENDIX I - HARDWARE & SOFTWARE COSTS

Description	Qty.	Unit Cost	Cost	On-Going Expense
Unix HP Server	1	100,000	100,000	15,000
Oracle Database Software	1	295,000	295,000	44,250
Routers	2	15,000	30,000	4,500
Load Balancing Software/Hardware	2	30,000	60,000	9,000
Performance/Monitoring Tools	1	64,000	64,000	9,600
NT Servers	10	12,000	120,000	18,000
Storage (90 gig)	1	63,000	63,000	9,450
H80 Unix Servers	2	70,000	140,000	21,000
SUN 22 or Unix Servers	4	20,000	80,000	12,000
Microsoft Software	1	35,000	35,000	5,250
Internet Development Software	1	104,200	104,200	15,630
TOTAL CBOE Pulse Development Costs			\$1,091,200	\$163,680

Newmark, Jordan

From: Lim, Ying
Sent: Thursday, November 02, 2000 10:36 AM
To: Aery, Raj
Subject: RE: Final java files for applet

One more thing Sir,

Are these the jars, which got roll-out?
Pulse.jar dated Nov 01 size 76995
PulseServer.jar dated Oct 31 size 355455

If so, I will check them into the version control app and labeled them as Pulse_0.01. Thanks.

Ying

-----Original Message-----

From: Aery, Raj
Sent: Thursday, November 02, 2000 9:26 AM
To: Lim, Ying
Subject: RE: Final java files for applet

We are in production as of this morning. We should label this build version 0.01. Thanks for all your help.

Raj.

-----Original Message-----

From: Lim, Ying
Sent: Thursday, November 02, 2000 9:23 AM
To: Aery, Raj
Subject: RE: Final java files for applet

Could you please provide us the latest status of this project? Thanks.

-----Original Message-----

From: Aery, Raj
Sent: Tuesday, October 31, 2000 1:52 PM
To: Lim, Ying
Cc: Elliott, Sandy; Chen, Hua; Peek, Brad; Hernandez, Joe
Subject: RE: Final java files for applet

Ying,

We are ready to have the Pulse Server build done at your earliest convenience. There will be no need to build the applet.

Thanks,
Raj.

-----Original Message-----

From: Lim, Ying
Sent: Tuesday, October 31, 2000 9:08 AM
To: Aery, Raj
Subject: RE: Final java files for applet

Thanks for the update!

-----Original Message-----

From: Aery, Raj
Sent: Tuesday, October 31, 2000 8:59 AM
To: Lim, Ying
Subject: RE: Final java files for applet

It does not go live today. We will most likely require another build today.

Raj

-----Original Message-----

From: Lim, Ying
Sent: Tuesday, October 31, 2000 8:57 AM
To: Aery, Raj
Subject: FW: Final java files for applet

How was the testing going? Does it go live today?

-----Original Message-----

From: Lim, Ying
Sent: Monday, October 30, 2000 11:22 AM
To: Aery, Raj
Subject: RE: Final java files for applet

Here you go!

-----Original Message-----

From: Aery, Raj
Sent: Monday, October 30, 2000 11:17 AM
To: Lim, Ying
Subject: RE: Final java files for applet

Please send me the jars so I can test them.

-----Original Message-----

From: Lim, Ying
Sent: Monday, October 30, 2000 11:05 AM
To: Aery, Raj
Cc: Elliott, Sandy; Jiang, Xingling; Hernandez, Joe; Chen, Hua; Peek, Brad; Meagher, Wally; Sidlo, Alan; Monjarro, Al
Subject: RE: Final java files for applet

Raj,

I could now build the applet using the ClearCase sources--thanks for your help. In case you are interested in knowing what the problem was--it was due to the environment differences in between the PATH, which was defined under the DOS batch file and the clearmake Make file.

I finished recompiling Pulse.jar (with the scrambled version) along with PulseServer.jar (just to ensure we got the latest copy) after re-importing the latest sources into ClearCase. They both build fine. I went ahead and loaded these jars onto both interpulse1 and interpulse2 servers under \pulseqa. Let us know when we can co-ordinate with EUC to propagate the files onto the production directories. Thanks.

Ying

-----Original Message-----

From: Aery, Raj
Sent: Monday, October 30, 2000 9:47 AM
To: Lim, Ying
Cc: Elliott, Sandy; Jiang, Xingling; Hernandez, Joe; Chen, Hua; Peek, Brad
Subject: Final java files for applet

Ying,

I have put the scrambled version of the applet in SS under Pulse\Applet\Final. These are the source files that we should be using for production. The packages are the same as the non-scrambled version, which are under Pulse\Applet\Src. There should be no changes necessary for the make file.

Let me know if you have any questions.

Thanks,
Raj.

Newmark, Jordan

From: Chen, Hua
Sent: Tuesday, September 12, 2000 1:47 PM
To: 'lowtherk@tsainc.com'
Cc: Aery, Raj; Peek, Brad; Hernandez, Joe
Subject: RE: Two questions

Ken,

For suspending user issue, I forwarded your question to Brad and Rebecca. I will let you know the result later.

For the Admin functionality for a user, you are right, it can be either way. I think the detail view has more info of a user so that's the reason I put it there. Also, I agree with you the applet should not update the command buttons every time an user is selected. So the command buttons should not be updated for each user selection, but they belongs to detail view.

Let me know if you need more info on this.

Thanks,

Hua

-----Original Message-----

From: lowtherk@tsainc.com [mailto:lowtherk@tsainc.com]
Sent: Tuesday, September 12, 2000 1:03 PM
To: chenh@cboe.com
Subject: Two questions

Hua,

When we stop allowing connections for a user (Admin Member Info Display), I have made the following assumptions and I want to check them with you. If it's not this, please let me know what it should be:

Toggles the approved status flag in the database. If the user is approved the status becomes suspended, likewise if the status is suspended it becomes approved. If the status is not approved, then no action can be taken and an error message will be returned.

Also, it seems like the functionality listed in the Admin Member Info Display detail view could be put into the Master View except for the Close Specific User connection. Is there a reason it is not? It just seems to make more sense that way, since any selection in the detail is going to do something with the same user every time. I hope this is clear enough.

Thanks,

Ken

Newmark, Jordan

From: Chen, Hua
Sent: Tuesday, September 12, 2000 8:31 AM
To: 'lowtherk@tsainc.com'; 'SuiterM@tsainc.com'
Cc: Hernandez, Joe; Aery, Raj; Peek, Brad
Subject: RE: Phone conversation recap

Ken and Mike,

I talked with Raj. We agree to use the same port pulse applets using to connect to PulseServer for Monitor applets. The port number is 8000. Because we will open the port any way for the pulse applets. So using port 80 is no more a requirement for Monitor Applets.

Thanks,

Hua

-----Original Message-----

From: lowtherk@tsainc.com [mailto:lowtherk@tsainc.com]
Sent: Monday, September 11, 2000 2:30 PM
To: chenh@cboe.com
Cc: SuiterM@tsainc.com
Subject: Phone conversation recap

Here is a recap of our phone conversation from earlier this afternoon (09/10/2000). Please notify me of any omissions, inconsistencies or questions you may have.

Mike and I called Hua to discuss the usage of an ASP between the MonitorApplet and the PulseMonitor. Hua explained that the ASP should act as a pass through that the MonitorApplet connects to via port 80 on the web server. The ASP will receive the message and connect to the PulseMonitor, forwarding the message from the MonitorApplet. The return message would come back the same way it was sent, via the ASP, then back to the MonitorApplet. Mike mentioned that this was the first time this had been requested and Hua agreed that it was new. Hua suggested the possibility of using ISAPI to implement the underlying socket connection, since ASP doesn't have socket connections built in. Mike mentioned that third party software was available at serverobjects.com for only \$50, which would cost much less than the development time involved in creating the socket. We offered to look into the option for Hua and he agreed.

The conversation ended with the agreement that this development would delay the project for at least several days. All agreed that it would be better to run on another port for Phase One until running with the web server could be worked out. Hua mentioned using an unused FTP port for temporary purposes.

Ken

Newmark, Jordan

From: Peek, Brad
Sent: Monday, September 11, 2000 8:01 AM
To: Athanas, Nick
Subject: decimal question

Nick,

I added code to determine if a price was in decimal, I don't know if this will make sense to you. But, our original code in JPrice (from the TNT code base) gets the price and the "scale". What I do is check if the scale is 0x0f. If it is I treat it as a fraction, otherwise as a decimal.

Any thoughts?

me

p.s. Linda wanted to get together for lunch awhile ago. You hear anything new?

J. Brad Peek

office: 312.786.7237
pager: 312.839.1232
email: peekb@cboe.com

Newmark, Jordan

From: Peek, Brad
Sent: Monday, September 11, 2000 7:03 AM
To: Aery, Raj; Chen, Hua
Subject: FW: PDS message rates

If either of you are interested, feel free to schedule a meeting with Tom

;-)

-----Original Message-----

From: Etheridge, Tom
Sent: Saturday, September 09, 2000 4:25 PM
To: Peek, Brad
Subject: RE: PDS message rates

Brad,

I suggest you schedule a meeting with me to discuss the limitations of the RCN application as it relates to non-post specific configurations. The problems PULSE will run into are not related to message rates, but rather cumulative class downloads over the course of the day.

TKE...

-----Original Message-----

From: Peek, Brad
Sent: Friday, September 08, 2000 10:00 AM
To: Etheridge, Tom
Subject: FW: PDS message rates

Tom,

Would you have numbers related to the questions below?

Thanks!

Brad

-----Original Message-----

From: Athanas, Nick
Sent: Friday, September 08, 2000 9:52 AM
To: Peek, Brad
Subject: RE: PDS message rates

The best person to talk to about this is Tom Etheridge. Whatever he tells you though will be obsolete after I load my PDSserver and RCNserver critical next week after expiration.
Nick

-----Original Message-----

From: Peek, Brad
Sent: Friday, September 08, 2000 9:45 AM
To: Athanas, Nick
Subject: PDS message rates

Nick,

We're doing our perf/systems testing and were wondering

1. What is average message rate between a PDS and RCN?
2. What is the max message rate ""?
3. What is max clients attached to any RCN (I think we've asked this before)?

Would you know or could you point me the right direction?

Brad

J. Brad Peek

office: 312.786.7237

pager: 312.839.1232

email: peekb@cboe.com

Newmark, Jordan

From: Peek, Brad
Sent: Friday, September 08, 2000 11:05 AM
To: Strege, John; Paradiso, Dennis; Smith, Jeff; Caldwell, Jeff; Kuehner, Mark; Aery, Raj; Chen, Hua; Peterson, Bob; Deweese, John; Monjarro, Al; Rittner, John; Elliott, Sandy; Gerdes, Linda; Danaher, Matt; Hernandez, Joe; Pwnicki, Bobbie; Schumacher, Curt; Roy, Gautam
Subject: Recap of the Pulse Implementations Tasks meeting, Friday @ 8:30

Below is an update to the Pulse Implementation tasks issues. Updates are in blue.

Thank you everyone for keeping up with all the varying issues related to the Pulse project!

Brad



Outstanding
Tasks.xls

Al Monjarro

#12 Progress report

Purchasing is attempting to replace the order for W2K Server licenses and replace that with an order for 3 W2K Advanced Server licenses.

#13/14 Progress report

In-progress, expected soon.

#41/47/55 Are these actually tasks or should they be removed?

These will be removed.

Jeff Smith

#43 How much time is involved to either move the test servers to the UMDC?

Approximately 1 day.

If the new servers arrive in time, How much time is required to set them up in the UMDC?

Approximately 2 days.

#44 Can this be completed prior to the servers being available?

It is being scheduled.

Mark Kuehner

#45/48 Progress report for the wire pulls being done prior to server installation Completed.

#62 Progress report on the SSA disk array adapter and network cables and estimated ETA? Solutions Technologies is ordering the array. Mark will check on a expected delivery date.

Does IBM have to come back for the install?

Solutions Technologies will install.

How much time is required?

A couple of hours.

#58/60 Are the network cables and RCI cables being pulled along with #45/48?

I will find out if the new Monitor server will fit in the same cabinet as the HP 8500s.

#73 When will PDS32 be available on the test network?

Dependant on #62.

How much time is required to move it to production and what is involved?

Several hours between DOSS, Mark Kuehner and Tom Kenny.

Jeff Caldwell

#49 Progress report for this week-end's install

Being rescheduled tentatively for the week-end of Sept 16th. This is predicated on resolving the issue of upgrading the N

class database servers from HP UX 11. to 11.ACE.

John Strega

#53 Do we have an IP for the Monitor server?

Yes, .46 and InterPulse1 and 2 will be .47 and .48.

Accessibility from the OPs area (if not what is involved)?

Yes, on the 3 PCs attached to Corp in the horseshoe.

#63,69 Progress report.

Dependant on #62.

Is 69 actually being done when 63 is completed?

Yes.

#109-121 Progress report

109 - 111 done on Thurs.

112 ordered,

113 - 117 possibly tonight or Monday

118 - 121 status will be covered next Friday.

Dennis Paradiso

#91 How much time is involved?

Should this be done just prior to the Pulse roll-out?

J. Brad Peek

office: 312.786.7237

pager: 312.839.1232

email: peekb@cboe.com

Newmark, Jordan

From: Peek, Brad
Sent: Friday, September 08, 2000 7:51 AM
To: Hernandez, Joe
Subject: Pulse & Stella

Joe,

Should I ask Jeff Reed to schedule a meeting when Stella is back for an overview of the Pulse schema? Just to give them a heads up?

Brad

J. Brad Peek

office: 312.786.7237

pager: 312.839.1232

email: peekb@cboe.com

Newmark, Jordan

From: Frazier-Runquist, Ginnie
Sent: Thursday, September 07, 2000 2:41 PM
To: IRB Mailing List; Gerdes, Linda; Smith, Eileen; Lee, Roger; Rittner, John
Subject: IRB Minutes for 9/6/00

The following are the minutes from the IRB Meeting held on 9/6/00. IRB Project Status Forms have been updated and are located in o:\document\irb status forms*. Use the status forms to obtain your referee signatures. Prior to your project implementation, the signed status form must be provided to Operations at the 1:00 pm daily meeting or the 9:30 am Friday meeting.

Schedule your project implementation by using the TESTREQ mailing list. Questions, contact Terry Land, Tom Etheridge, or any member of the Q/A Staff.

PROJECT CHARTER:

WORK REQUEST: 2134
PROJECT NAME: CBOE Pulse
SUBMITTED BY: Linda Gerdes

WORK REQUEST: 2190
PROJECT NAME: NSCC Transmission For Exchange Traded Funds
SUBMITTED BY: Eileen Smith

ASSURANCE/IMPLEMENTATION TEST PLANS:

WORK REQUEST: 2187
PROJECT NAME: OS/390 Release 8
SUBMITTED BY: Roger Lee
REFEREES: R. Kupski, S. Elliott, T. Land, E. Horvath, J. Ulowetz

WORK REQUEST: 2221
PROJECT NAME: Prod Routers IOS Upgrade
SUBMITTED BY: John Rittner
REFEREES: J. Strega, T. Etheridge, T. Land, M. Todd, B. Peterson, D. Wegener

Ginnie Runquist :-)

Newmark, Jordan

From: Frazier-Runquist, Ginnie
Sent: Tuesday, September 05, 2000 2:33 PM
To: IRB Mailing List; Rittner, John; Gerdes, Linda; Smith, Eileen; Lee, Roger
Subject: FW: IRB AGENDA FOR 9/6/00 - UPDATE

The item in red will be a walk-in for the 9/6/00 meeting

-----Original Message-----

From: Frazier-Runquist, Ginnie
Sent: Tuesday, September 05, 2000 8:32 AM
To: IRB Mailing List; Lee, Roger; Smith, Eileen; Gerdes, Linda
Subject: IRB AGENDA FOR 9/6/00

The following is the Agenda for the IRB Meeting which will be held on **9/6/00 in lower level conference room, at 9:30 am.** IRB Project Status Forms have been updated and are located in o:\document\irb status forms*. Use the status forms to obtain your referee signatures. Prior to your project implementation, the signed status form must be provided to Operations at the 1:00 pm daily meeting or the 9:30 am Friday meeting.

Schedule your project implementation by using the TESTREQ mailing list. Questions, contact Terry Land, Tom Etheridge, or any member of the Q/A Staff.

PROJECT CHARTER:

WORK REQUEST: 2134
PROJECT NAME: CBOE Pulse
SUBMITTED BY: Linda Gerdes
O:\document\cboe\2134_CBOE_Pulse\2134pc.doc

WORK REQUEST: 2190
PROJECT NAME: NSCC Transmission For Exchange Traded Funds
SUBMITTED BY: Eileen Smith
O:\document\cboe\2190 NSCC_Transmission_for_Exchange_Traded_Funds\2190pc.doc

WORK REQUEST: 2187
PROJECT NAME: OS/390 Release 8
SUBMITTED BY: Roger Lee
O:\document\cboe\2187_OS_390_Release_8\2187_TP.doc

Work Request: 2221
Project Name: Prod Routers IOS Upgrade
Submitted by: John Rittner
O:\document\cboe\2221_Prod_Routers_IOS_Upgrade\2221TP.doc

Ginnie Runquist :-)

Newmark, Jordan

Subject: Updated: Weekly Pulse Implementation Tasks review
Location: 4A

Start: Fri 9/1/2000 8:30 AM
End: Fri 9/1/2000 9:30 AM
Show Time As: Tentative

Recurrence: Weekly
Recurrence Pattern: every Friday from 8:30 AM to 9:30 AM

Meeting Status: Not yet responded

Required Attendees: Strega, John; Paradiso, Dennis; Smith, Jeff; Caldwell, Jeff; Kuehner, Mark; Aery, Raj; Chen, Hua; Peterson, Bob; Deweese, John; Monjarro, Al; Rittner, John; Elliott, Sandy; Pivnick, Bobbie; Schumacher, Curt; Roy, Gautam; Conference Room 4A; Gerdes, Linda; Danaher, Matt; Hernandez, Joe; Land, Terry

I added some additional meeting slots to ensure the Friday 8:30 stayed available and also added some attendees

=====

We would like to schedule a weekly meeting to review the status of the Pulse project.

Originally, we had thought that Wednesday would be best to meet. There appears to be too many scheduling conflicts so Friday was chosen. If you cannot attend, some else from your specific areas would be greatly appreciated. An updated spread sheet and recap from last Friday's meeting will follow later today.

Thanks,

Brad

Newmark, Jordan

From: Hollerman, Mike
Sent: Thursday, August 31, 2000 9:30 AM
To: Peek, Brad
Subject: Electronic copies of Pulse screens



SCREEN3.xls

Newmark, Jordan

From: Peek, Brad
Sent: Friday, September 08, 2000 3:13 PM
To: Dillon, Maureen
Subject: RE: HP and cabinets

you are most kind and generous!

;-)

Have a great week-end!

Brad

-----Original Message-----

From: Dillon, Maureen
Sent: Friday, September 08, 2000 3:10 PM
To: Peek, Brad
Subject: RE: HP and cabinets

I gave the question to Comark and they are going to have one of their technical people call you direct. Ok?

-----Original Message-----

From: Peek, Brad
Sent: Friday, September 08, 2000 10:59 AM
To: Dillon, Maureen
Cc: Hernandez, Joe; Aery, Raj; Chen, Hua
Subject: HP and cabinets

Maureen,

I'm wondering if you know who I should contact. We're trying to determine if the Pulse Monitor server that we ordered below can be rack mounted in the same cabinet as the HP 8500 Pulse servers.....

Thanks!

Brad

-----Original Message-----

From: Hernandez, Joe
Sent: Monday, August 14, 2000 1:10 PM
To: Purchasing
Cc: Chen, Hua; Aery, Raj; Peek, Brad
Subject: Monitor Server

Please order the following for the Pulse project to facilitate monitoring of the application servers and statistics.

One HP LPr 2U Unit (3.5 Inches High)
2 x 850 PIII Processors
256 MB Ram
9.1 GB HD
1 SCSI Controller for EMC

I will be on vacation so please direct any questions to either Hua Chen or Raj Aery.

Thank you,
Joseph Hernandez

Newmark, Jordan

From: Kuehner, Mark
Sent: Friday, September 08, 2000 2:37 PM
To: Smolinske, Greg
Cc: Vliet, Matt; Buffano, Ron; Dillon, Maureen; Etheridge, Tom; Peek, Brad
Subject: FW: IBM delivery.

These disk array adapters are part of the IBM H80 server demo mentioned in this email. I do not know of any demo PO # but I need these cards for installation Monday

-----Original Message-----

From: Vliet, Matt
Sent: Tuesday, June 27, 2000 10:25 AM
To: Kuehner, Mark
Subject: FW: IBM delivery.

-----Original Message-----

From: Etheridge, Tom
Sent: Tuesday, June 27, 2000 10:25 AM
To: Schumacher, Curt; Vliet, Matt; Warehouse
Cc: Weyh, Dawn; King, Juanita; Madison, Evelyn; Schumacher, Curt; Buffano, Ron; Vliet, Matt; Strega, John
Subject: RE: IBM delivery.

This is for the H80 Upgrade beta program (which has a loaner PO). This equipment is two internal disks plus a storage drawer. Please deliver this to the CDC on the 2nd floor.

TKE...

-----Original Message-----

From: Schumacher, Curt
Sent: Tuesday, June 27, 2000 9:27 AM
To: Vliet, Matt; Etheridge, Tom
Subject: FW: IBM delivery.

?????????? Is this for the h80 trial

-----Original Message-----

From: Warehouse
Sent: Monday, June 28, 2000 2:12 PM
To: Dillon, Maureen
Cc: Weyh, Dawn; King, Juanita; Madison, Evelyn; Schumacher, Curt; Buffano, Ron
Subject: IBM delivery.

Today, Emery Worldwide delivered one small pallet to Curt's attention. This shipment is from IBM-Singapore and does not list a CBOE PO# (it lists an Order #5181F0018565). The contents are a qty-1 of a 2104 Machine. Please provide a PO# so this can be delivered. Also, does this item need to be tagged for inventory?

Thank you,

Greg Smolinske

Deborah A. Belanger
4410 Gray Road
De Forest, WI 53532

Date: May 9, 2007
Our Ref. No.: 046238-0101

Statement of Account

Outstanding Invoices:

<u>Date</u>	<u>Invoice No.</u>	<u>Amount</u>	<u>Credits</u>	<u>Balance</u>
12/9/2005	26109692	\$2,688.69	(\$1,219.68)	\$1,469.01
1/9/2006	26121130	\$14,967.16	\$0.00	\$14,967.16
2/22/2006	27003957	\$684.00	\$0.00	\$684.00
3/10/2006	27011404	\$4,417.81	\$0.00	\$4,417.81
4/12/2006	27023404	\$2,009.00	\$0.00	\$2,009.00
5/11/2006	27035072	\$1,500.07	\$0.00	\$1,500.07
6/22/2006	27050678	\$774.08	\$0.00	\$774.08
3/14/2007	28014211	\$3,973.93	\$0.00	\$3,973.93
<i>Total Balance Outstanding:</i>				\$29,795.06

Current Invoice:

<u>Date</u>	<u>Invoice No.</u>	<u>Amount</u>	<u>Credits</u>	<u>Balance</u>
05/09/2007	28035058	\$738.65	\$0.00	\$738.65

Total Amount Due: \$30,533.71



FOLEY & LARDNER LLP
VEREX PLAZA
150 EAST GILMAN STREET
MADISON, WI 53703-1481
TELEPHONE (608) 257-6035
FACSIMILE (608) 256-4258
WWW.FOLEY.COM

Deborah A. Belanger
4410 Gray Road
De Forest, WI 53532

Date: May 9, 2007
Invoice No.: 28035058
Our Ref. No.: 046238-0101

Services through
April 30, 2007

Amount due for professional services rendered regarding
POST DIVORCE \$705.00

Total Expenses: \$33.65

Invoice Total: \$738.65

Total Amount Due: \$738.65

Please reference your account number 046238-0101 and your
invoice number 28035058 with your remittance payable to Foley & Lardner
LLP.

Foley & Lardner LLP
Federal Employer Number:
39-0473800

BELANGER, DEBORAH A.
Our Ref. No.: 046238-0101
Invoice No.: 28035058

Page 2
Foley & Lardner LLP
May 9, 2007

Professional Services Detail

3/30/07	MSH	Draft contempt papers.	0.70	\$220.50
4/3/07	ARK	Work on new contempt motion and hearing (billed only .1 hour).	0.10	\$38.50
4/27/07	MSH	Case planning regarding hearing/discovery.	0.20	\$63.00
4/27/07	HMM	Office conference regarding upcoming hearing issues; draft subpoena duces tecum; telephone call with Dane County legal Notice re service of same; draft and send letter to Dane County Legal Notice regarding service of subpoena; have same served.	1.60	\$256.00
4/30/07	MSH	Draft correspondence to court; hearing preparation.	0.20	\$63.00
4/30/07	HMM	Work on issue of service of subpoena.	0.40	\$64.00
Services Total:			3.20	\$705.00

Expenses Incurred

Description	Amount
Photocopying Charges	\$30.60
Color Photocopying Charges	\$3.00
Other Fees	(\$10.00)
Mailing Expense	\$10.05
Expenses Total:	\$33.65

Certain services and expenses, which involve payments made to third parties, include an additional charge based upon our internal costs with respect to those services and expenses.

BELANGER, DEBORAH A.
Our Ref. No.: 046238-0101
Invoice No.: 28035058

Page 3
Foley & Lardner LLP
May 9, 2007

Expense Detail

Photocopying Charges

03/02/07	17 Copies.	2.55
03/06/07	4 Copies.	0.60
04/03/07	8 Copies.	1.20
04/03/07	8 Copies.	1.20
04/03/07	156 Copies.	23.40
04/27/07	Photocopying Charges	1.65
		<hr/>
		\$30.60

Color Photocopying Charges

04/03/07	Color Photocopying Charges	3.00
		<hr/>
		\$3.00

Other Fees

02/07/07	Reversal From Void Check Number: 1032373 Bank Id: 992 Voucher Id: 1583946 Vendor: Dane County Clerk Of Court	(5.00)
02/07/07	Reversal From Void Check Number: 1032374 Bank Id: 992 Voucher Id: 1583947 Vendor: Dane County Clerk Of Court	(5.00)
		<hr/>
		(\$10.00)

Mailing Expense

03/06/07	Mailing Expense	1.17
03/12/07	Mailing Expense	0.39
03/15/07	Mailing Expense	0.39
03/30/07	Mailing Expense	0.39
04/03/07	Mailing Expense	2.31
04/03/07	Mailing Expense	2.31
04/03/07	Mailing Expense	0.39
04/03/07	Mailing Expense	2.31
04/27/07	Mailing Expense	0.39
		<hr/>
		\$10.05

Expenses Total:	\$33.65
-----------------	---------



FOLEY & LARDNER LLP
VEREX PLAZA
150 EAST GILMAN STREET
MADISON, WI 53703-1481
TELEPHONE (608) 257-6035
FACSIMILE (608) 258-4258
WWW.FOLEY.COM

BELANGER, DEBORAH A.

Date: May 9, 2007
Invoice No.: 28035058
Our Ref. No.: 046238-0101

Remittance Advice

Outstanding Invoices:

12/9/2005 - 26109692	\$1,469.01
1/9/2006 - 26121130	\$14,967.16
2/22/2006 - 27003957	\$684.00
3/10/2006 - 27011404	\$4,417.81
4/12/2006 - 27023404	\$2,009.00
5/11/2006 - 27035072	\$1,500.07
6/22/2006 - 27050678	\$774.08
3/14/2007 - 28014211	\$3,973.93

<i>Prior Outstanding Balance</i>	\$29,795.06
----------------------------------	-------------

Current Invoice:

05/09/2007 - 28035058	\$738.65
-----------------------	----------

Total Amount Due:	\$30,533.71
--------------------------	--------------------

Should you wish to remit your payment via wire transfer,
please include our reference no. 046238-0101 and/or
invoice no. 28035058 and forward to:

U.S. Bank
Wire Transfer Dept.
777 E. Wisconsin Ave.
Milwaukee, WI 53202
ABA #075000022
ACCT #112031389
ACCT NAME: Foley & Lardner LLP

Harrison, Alena

From: Newmark, Jordan [newmark@cboe.com]
Sent: Wednesday, May 09, 2007 12:00 PM
To: Hunter, Paul S.
Subject: RE: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

Attachments: Response to OA for Pulse.doc; 1.131 Declaration for Pulse 1.doc; Exhibit 1 _ pulse charter.pdf; Exhibit 2 _ pulse emails.pdf



Response to OA for 1.131 Declaration
Pulse.doc (...)



1.131 Declaration
for Pulse 1....



Exhibit 1 _ pulse
charter.pdf ...



Exhibit 2 _ pulse
emails.pdf (...)

Paul,

Attached are electronic copies of:

- (1) the Response (in Word);
- (2) the Rule 1.131 Declaration (in Word);
- (3) Exhibit 1 to the Declaration (.pdf); and
- (4) Exhibit 2 to the Declaration (.pdf).

Our scanners are currently offline; once they are running again, I will forward a scanned version of the executed declaration.

Regards,

Jordan

-----Original Message-----

From: Hunter, Paul S. [mailto:PHunter@foley.com]
Sent: Thursday, April 12, 2007 9:17 AM
To: Newmark, Jordan
Subject: RE: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

OK. Thanks for letting me know.

Paul
Paul S. Hunter
Foley & Lardner LLP
150 E. Gilman St.
Madison, WI 53703
Ph: 608-258-4292
Fx: 608-258-4258

-----Original Message-----

From: Newmark, Jordan [mailto:newmark@cboe.com]
Sent: Thursday, April 12, 2007 8:48 AM
To: Hunter, Paul S.
Subject: RE: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

FYI - One of the inventors in the above-captioned application (Michael Hollerman) is on short-term leave and has not returned my messages. I am trying to get an authorization for his signature by proxy.

As a result, we may need to do a one-month extension. I will keep you posted.

Regards,

Jordan

-----Original Message-----

From: Hunter, Paul S. [mailto:PHunter@foley.com]
Sent: Monday, April 09, 2007 9:10 AM
To: Newmark, Jordan
Subject: RE: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

Jordan,

Will do.

Paul
Paul S. Hunter
Foley & Lardner LLP
150 E. Gilman St.
Madison, WI 53703
Ph: 608-258-4292
Fx: 608-258-4258

-----Original Message-----

From: Newmark, Jordan [mailto:newmark@cboe.com]
Sent: Monday, April 09, 2007 9:03 AM
To: Hunter, Paul S.
Subject: RE: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

Paul,

I am in the process of having a 1.131 declaration signed by all of the inventors (one of which now resides in CA). As soon as I have the executed papers, I will touch base with you.

As an aside, in the future, please discuss reviewing materials and proposing responses with me prior to billing time for same. In this case, as the effective date of the cited referenced is so close to our filing date, a suggestion of investigating the possibility of a 1.131 declaration would have been much more appreciated that a proposed response directed to the merits of Examiner's argument.

Jordan

Jordan Newmark
Intellectual Property Counsel
Chicago Board Options Exchange
400 S. LaSalle Street
Chicago, IL 60605
(312) 786-7909
newmark@cboe.com
www.cboe.com

This e-mail message and any attachments may contain information that is confidential and proprietary to Chicago Board Options Exchange, Incorporated (CBOE) or a wholly owned CBOE subsidiary and/or information that is protected by the attorney-client or other privilege. If you believe you may not be an intended recipient of this e-mail message, its use and disclosure are prohibited. In that event, please do not read the message or any attachments, notify the sender by reply e-mail that you may have received this message in error, and delete the e-mail message and all attachments and destroy any printed copies of such materials.

-----Original Message-----

From: Hunter, Paul S. [mailto:PHunter@foley.com]

Sent: Monday, April 09, 2007 8:44 AM

To: Newmark, Jordan

Subject: RE: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

Jordan,

This note is just a reminder that the 3 month deadline for responding to the office action mention in the email below is one week away. Please advise when we can expect to receive your draft.

Thank you,

Paul

Paul S. Hunter

Foley & Lardner LLP

150 E. Gilman St.

Madison, WI 53703

Ph: 608-258-4292

Fx: 608-258-4258

-----Original Message-----

From: Newmark, Jordan [mailto:newmark@cboe.com]

Sent: Thursday, March 15, 2007 3:38 PM

To: Hunter, Paul S.

Subject: FW: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

Paul,

Please confirm receipt of my previously sent instructions included in the message below.

Regards,

Jordan

> -----Original Message-----

> From: Newmark, Jordan

> Sent: Wednesday, March 07, 2007 9:45 AM

> To: 'PHunter@foley.com'

> Subject: Your Ref. No.: 068550-0105 for U.S. Patent Application

No. 09/912,709

>

> Paul,

>

> Pursuant to your correspondence dated February 7, 2007, I am writing to inform you that I will draft the response to the Office Action dated January 16, 2007 for the above-referenced case. I will provide the response to you by April 2, 2007 for filing.

>

> Please contact me with any questions.

>

> Regards,

>

> Jordan

>

> Jordan Newmark

> Intellectual Property Counsel

> Chicago Board Options Exchange

> 400 S. LaSalle Street

> Chicago, IL 60605
> (312) 786-7909
> newmark@cboc.com
> www.cboc.com

>
>
>
>
> This e-mail message and any attachments may contain information that is confidential and proprietary to Chicago Board Options Exchange, Incorporated (CBOE) or a wholly owned CBOE subsidiary and/or information that is protected by the attorney-client or other privilege. If you believe you may not be an intended recipient of this e-mail message, its use and disclosure are prohibited. In that event, please do not read the message or any attachments, notify the sender by reply e-mail that you may have received this message in error, and delete the e-mail message and all attachments and destroy any printed copies of such materials.

>
>
The preceding email message may be confidential or protected by the attorney-client privilege. It is not intended for transmission to, or receipt by, any unauthorized persons. If you have received this message in error, please (i) do not read it, (ii) reply to the sender that you received the message in error, and (iii) erase or destroy the message.

Legal advice contained in the preceding message is solely for the benefit of the Foley & Lardner LLP client(s) represented by the Firm in the particular matter that is the subject of this message, and may not be relied upon by any other party.

Internal Revenue Service regulations require that certain types of written advice include a disclaimer. To the extent the preceding message contains advice relating to a Federal tax issue, unless expressly stated otherwise the advice is not intended or written to be used, and it cannot be used by the recipient or any other taxpayer, for the purpose of avoiding Federal tax penalties, and was not written to support the promotion or marketing of any transaction or matter discussed herein.

The preceding email message may be confidential or protected by the attorney-client privilege. It is not intended for transmission to, or receipt by, any unauthorized persons. If you have received this message in error, please (i) do not read it, (ii) reply to the sender that you received the message in error, and (iii) erase or destroy the message.

Legal advice contained in the preceding message is solely for the benefit of the Foley & Lardner LLP client(s) represented by the Firm in the particular matter that is the subject of this message, and may not be relied upon by any other party.

Internal Revenue Service regulations require that certain types of written advice include a disclaimer. To the extent the preceding message contains advice relating to a Federal tax issue, unless expressly stated otherwise the advice is not intended or written to be used, and it cannot be used by the recipient or any other taxpayer, for the purpose of avoiding Federal tax penalties, and was not written to support the promotion or marketing of any transaction or matter discussed herein.

The preceding email message may be confidential or protected by the attorney-client privilege. It is not intended for transmission to, or receipt by, any unauthorized persons. If you have received this message in error, please (i) do not read it, (ii) reply to the sender that you received the message in error, and (iii) erase or destroy the message. Legal advice contained in the preceding message is solely for the benefit of the Foley & Lardner LLP client(s) represented by the Firm in the particular matter that is the subject of this message, and may not be relied upon by any other party.

Internal Revenue Service regulations require that certain types of written advice include

a disclaimer. To the extent the preceding message contains advice relating to a Federal tax issue, unless expressly stated otherwise the advice is not intended or written to be used, and it cannot be used by the recipient or any other taxpayer, for the purpose of avoiding Federal tax penalties, and was not written to support the promotion or marketing of any transaction or matter discussed herein.